ABSTRACT

A disk drive includes a storage disk, a data transducer, an actuator assembly and a positioner. The actuator assembly supports the data transducer over the storage disk. The actuator assembly includes a rotatable actuator hub and a longitudinal axis. The positioner moves the actuator assembly to position the data transducer relative to the storage disk. During movement of the actuator assembly, the actuator hub is subject to a resultant force that causes track misregistration of the data transducer. The positioner includes a magnet assembly that generates a magnetic field, a first conductor region and a second conductor region. In one embodiment, the conductor regions cooperate with the magnet assembly to generate a first force and a second force that are each directed at an angle having an absolute value that is greater than zero degrees and less than approximately 45 degrees relative to the longitudinal axis of the actuator assembly. In another embodiment, the conductor regions are each positioned at an angle having an absolute value of greater than approximately 45 degrees and less than 90 degrees relative to the longitudinal axis of the actuator assembly.